

WIRELESS DUAL PADDLE WALL SWITCH



BDA_ZHS03_b



MANUFACTURER INFORMATION

Dear Customer,
should you require technical advice and your retailer could not help please contact our technical support.

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Business hours:
Monday to Thursday: 08:00 - 17:00
Friday: 08:00 - 14:30

GB USER MANUAL ZHS03

Congratulations and thank you for purchasing the Schwaiger ZHS03 product. Below you will find useful operating guidelines.

Product description

Not only can both Z-Wave devices be controlled directly with the Z-Wave.Me wireless wall switch, but in an IP gateway different scenes can be activated. Although the wireless wall switch controls devices directly, it cannot as Z-Wave controller manage their networks but always requires an additional controller for inclusion and exclusion. The device can operate in different modes, which are determined by configuration parameters:

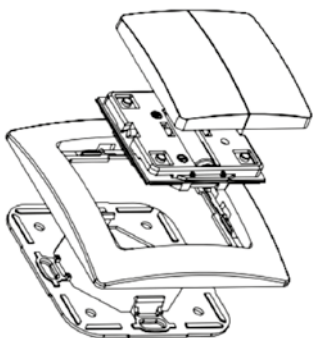
1. Control groups of other Z-Wave devices with „ON“, „OFF“ and dimming commands.
2. Control of devices in the vicinity of the fob with „ALL ON“ or „ALL OFF“ - commands.
3. Activation of pre-defined scenes in gateways or other Z-Wave devices.

Installation guidelines

The device is delivered in working condition with a built-in battery. In this default condition simply pressing on one of the buttons - since the device is not included in a network and therefore unable to send a message - will result in an error code (flashing red LED). In this manner the operational readiness of the device can be tested.

The device can be mounted on every level and dry surface, either with screws or double-sided tape. First the base plate is secured to the wall. In the next step, the switching element is secured to the frame. The electronics module is used to fix the frame to the base plate, as shown in the figure. Finally, the rocker switches are mounted on the electronics module.

For a battery change the rocker switches must be removed. The CR battery can be replaced by pressing the small locking tab above the battery.



Logging in (inclusion) or logging out (exclusion) of the sensor.

The device operates in normal control mode or in management mode. Pushing all four buttons for 5 sec. will turn the device into management mode (indicated by blinking green LED). The management mode will time out after 10 seconds if no further button is pushed. Button 1 confirms standard inclusion or exclusion started by a primary controller, button 2 issues a Node Information Frame or wakeup notification, button 4 is used to add devices into association groups and button 1 confirms inclusion or exclusion in NWI (network wide inclusion) mode.

The device distinguishes between two operating modes: standard and management mode

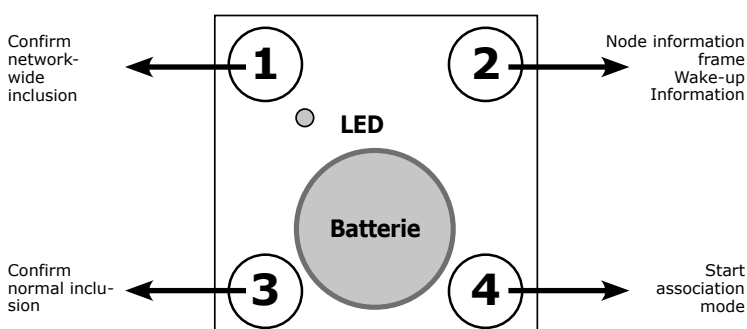
Standard mode:

In this mode, the wireless wall switch can control other devices or activate scenes.

Management mode:

The device is switched to management mode when all four buttons are held down together for at least 5 seconds. A slow flashing green LED confirms the management mode. In management mode the buttons have other functions. Without further button operation, the unit will return to standard mode in 10 seconds. Each operation also ends the management mode.

In management mode the following actions can be performed:



Button 1

Network-wide inclusion: the device can be added to a Z-Wave network from anywhere in the network. This requires a primary controller that supports explorer frames. This mode lasts 20 seconds and stops automatically. Touching any key also stops the mode.

Button 2

Sends node information frame and wake-up messages (as outlined in the following chapters).

Button 3

Standard inclusion/exclusion mode: the device is directed by a controller of direct wireless range. Touching any button stops the mode. An exclusion of the device from a network resets the device to its factory defaults.

Button 4

Set associations: to assign target devices to one of the 4 association groups

Batteries

This device is battery-operated. Use only batteries of the specified type. Used batteries contain hazardous substances and must not be disposed of with household waste! Battery type: 1 x CR2032

Performance of the device in the Z-Wave network

When delivered the device is not connected to a Z-Wave network. It must be integrated into a Z-Wave network so that it can communicate with other Z-Wave devices. This process is called Z-Wave inclusion. Devices can also be removed from networks again. This process is called Z-Wave exclusion. Both processes are started from a controller that must be connected to an inclusion and/or exclusion mode. The manual of the controller contains information on how it is to be connected in these modes. Devices can only be added when the controller of the Z-Wave network is in inclusion mode. Leaving the network through exclusion will reset this device to its factory defaults.

Bring your Z-Wave controller in the inclusion mode. Bring your wireless wall switch in management mode and press button 3. The device is included and/or excluded locally by pressing key 3 in management mode. In order to include and/or exclude the device network-wide button 1 in management mode must be pressed.

Operation of the device

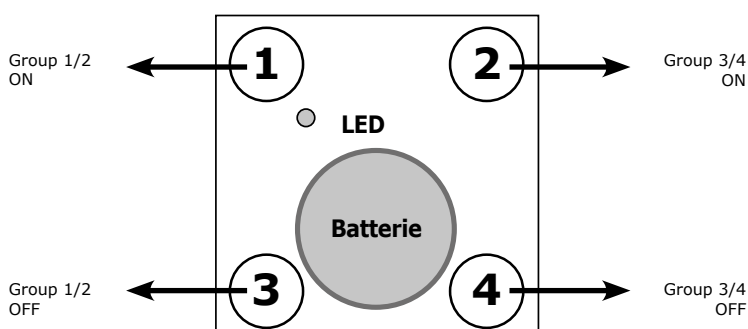
Depending on the mode and further configuration the device can be set differently.

Standard mode:

Controlling a group with 2 buttons (This is the default setting). One group (no. 1) of the equipment is controlled with buttons 1 and 3; the other group (no. 2) is controlled with buttons 2 and 4. Buttons 1 and 2 switch the actuators „ON“, buttons 3 and 4 switch the actuators „OFF.“ If double-click the setting parameters #1 or #2 is activated, groups 3 and 4 can be controlled by means of short double clicking.

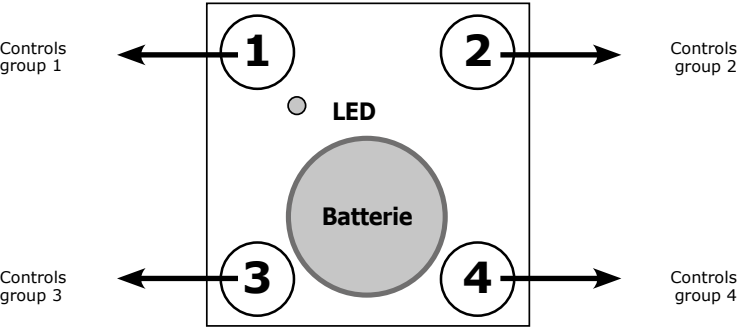
Dimming of devices is enabled through pressing the buttons for a long time (high-dimming with buttons 1 and 2, low-dimming with buttons 3 and 4) and/or a short click and pressing for groups with a double click.

A single click controls groups 1 and 3
A double click controls groups 2 and 4



Controlling a group with a button:

in this mode the groups are controlled by a respective button. Pressing a button switches „ON,“ double clicking a button switches „OFF.“ High-dimming of devices is achieved by holding the button down for a long time and low-dimming is achieved by clicking and holding the button. The group number corresponds to the button number



Control commands:

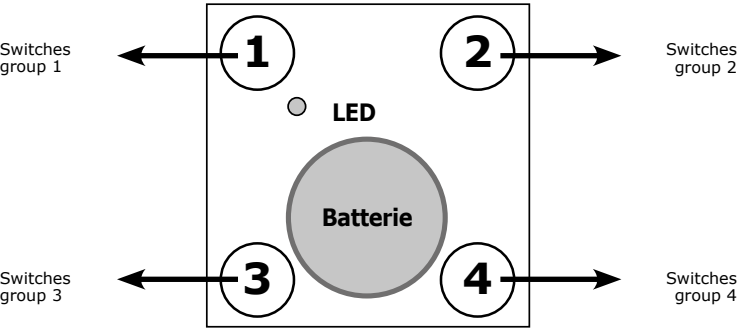
The configuration parameters # 11 to # 14 regulate which commands are sent when the buttons are pressed.

Direct control of devices occurs through „ON,“ „OFF,“ „HIGH-DIMMING“ and „DOWN-DIMMING.“

The special commands „ALL ON“ and „ALL OFF“ send a group call to all devices in direct wireless range. The devices react according to their settings to the command „switch everything.“ This mode includes the communication setting 7.

Simple scene control with configurable scene commands.

Devices in association groups are individually configured with the Z-Wave command class „scene controller configuration.“ A scene can be configured via an association group. As can be seen in the figure, the number of the scene is by default equal to the number of association group. This mode is always used by default to activate scenes in IP gateways, but can also be used to activate predefined scenes in other devices.



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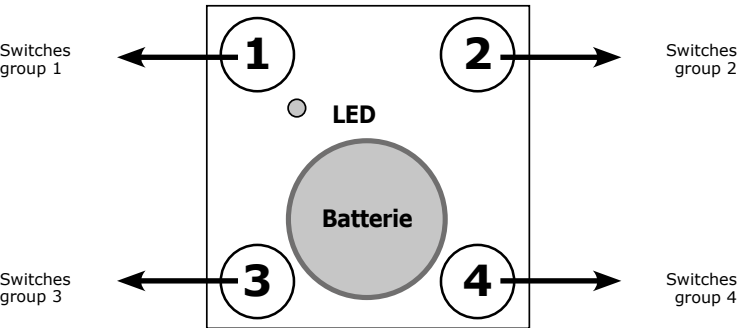
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Advanced scene control:

In this mode, pressing any key will trigger a scene command with a set number. The scene number is a combination of the group number and the defined button press action. It always consists of two digits. The group number determines the first digit; the action determines the second digit. The following actions are possible:

- 1 = on
- 2 = off
- 3 = high-dimming start
- 4 = low-dimming start
- 5 = high-dimming stop
- 6 = low-dimming stop

Example: clicking/double-clicking button 1 sends an activation signal for scene 11 (single-clicking) process and scene 12 (double off, controlling a group with a button is selected). This mode includes the communication setting 6.

Child protection

The device has a child protection mechanism. Local operation by using buttons is blocked and only wireless operation is possible. The device can be set to child lock mode. In this mode no local control is possible. The child lock mode can only be activated wirelessly. Only in protection mode with input mode it is possible to disable protection by pressing any button for 5 seconds. Only in protection mode with input mode it is possible to disable protection by pressing any button for 5 seconds. The protection is activated again after 5 seconds.

Communication with a battery-powered device

The device is battery-powered and to save power it is thus usually in deep-sleep mode. In deep sleep mode the device cannot receive any wireless signals. Therefore, a static (controller) is required, which is mains-powered and therefore always available for wireless data transmission. This controller - for example, an IP gateway - manages a message mailbox for this battery-powered device, in which messages to the unit can be temporary stored. Without such a static controller using this battery-powered device will quickly discharge the battery or render use completely impossible.

This device regularly „wakes up,“ reports this by sending a so-called wake up notification and then empties its mailbox in the static controller. The node ID of the controller and a wake up interval must be defined with the inclusion. If the inclusion is carried out by means of a static controller such as an IP gateway, this controller will automatically perform this configuration and usually offer a user interface, to adapt the wake up interval to user needs. The wake up interval is a compromise between maximum battery life and minimum response time of the battery-powered device.

Immediately after the inclusion the device remains awake about 2.5 seconds so that a controller can perform configuration tasks. The device can then always be woken manually. For this, the management mode is activated (keep all four buttons pressed for 5 seconds) and then press button 2. The minimum wake up interval is 240 seconds. However, it is highly recommended that you choose a longer wake up interval to save battery life. If the device ID 0 is selected as the target device for the wakeup notification, the periodic wake-up is suppressed. It is possible to specify the device number 255 as the destination device for the wake up notification. In this case, the message is sent as a broadcast to all devices with direct wireless connection. The advantage of immediate notification is offset by the disadvantage that, where appropriate, the device consumes more time in active mode and thus more battery capacity.

Meaning of LED signals

- 1. Confirmation - green 2 seconds
- 2. Error - red 2 seconds
- 3. Confirmation of each keystroke - green 1/4 second
- 4. Waiting for selecting the network mode - green flash
- 5. Waiting for selection of group in association mode - green flashes quickly
- 6. Waiting for node information frame in association mode - green-red - without blinking

Technical specifications

Protection class	IP 20
Battery type	1 x CR2032
Z-Wave frequency	868.42 MHz (SRD Band)
Wireless range	Up to 100 m outdoors, Up to 20 m in buildings on average
Explorer Frames	Yes
SDK	4.54 pl1
Type of equipment	Slave with routing capabilities
General Z-Wave device type	Remote switch
Special Z-Wave device type	Multi-level remote switch
Router	No
FLIRS	No
Firmware Version	1.2

Disposal information

This device contains batteries. Please refer to the applicable disposal regulations for batteries. It is an electrical device. It can be disposed of free of charge at specified disposal sites.

EC Declaration of Conformity

„Hereby Schwaiger GmbH declares that the product ZHS03 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.“ The Declaration of Conformity can be found at the following address:
<http://www.schwaiger.de/downloads>